

## Chrysanthemum Named 'White Elite Reagan'

### RELATED CULTIVARS

'White Elite Reagan' is related to 'White Reagan' (USPP # 8744)) and to the co-pending applications of 'Cream Elite Reagan' and 'Sunny Elite Reagan'. The cultivar 'White Elite Reagan' is a natural mutant of 'White Reagan'. The co-pending 'Cream Elite Reagan' and 'Sunny Elite Reagan' are natural mutants from 'White Elite Reagan'.

### BACKGROUND OF THE INVENTION

'White Elite Reagan' is a product of a breeding and selection program that had the objective of finding mutants of 'White Reagan'. The new plant of the present invention comprises a new and distinct cultivar of chrysanthemum plant that is a natural occurring sport of a parent chrysanthemum named 'White Reagan' (USPP # 8744). A comparison with Parent chrysanthemum 'White Reagan' is also made in this application. The new cultivar was discovered as a whole plant mutation in September 1995 by Rob Noodelijk in a controlled environment (greenhouse) in Rijsenhout Holland. The first act of asexual reproduction of 'White Elite Reagan' was accomplished when vegetative cuttings were taken from the initial selection in November 1995 in Rijsenhout Holland.

### SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of chrysanthemum bearing medium sized blooms with white ray-florets and yellow-green disc florets.

### BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of chrysanthemum is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

Fig. 1 shows a plant of the cultivar in full bloom.

Fig. 2 shows the various stages of bloom of the new cultivar.

Fig.3 shows the foliage of the new cultivar.

### DESCRIPTION OF THE INVENTION

This new variety of chrysanthemum is of the botanical classification dendranthema grandiflora. The observations and measurements were gathered from plants grown in April / May in a greenhouse in Rijsenhout Holland in a photo-periodic controlled crop under conditions generally used in commercial practice. The greenhouse temperatures during this crop were at day-time between 18°C and 25°C and at night 20°C. After a long day period of 14 days the photo-periodic response time in this crop was 49 days. After the long day period to flowering growth retardants were applied 2 to 3 times in an average dose of 2.5 gram / liter water. No tests were done on disease or insect resistance or susceptibility. This new variety produces medium sized blooms with white ray-florets and yellow-green disc-florets blooming on the plant for 5 weeks. This new variety of chrysanthemum has been found to retain its distinctive characteristics throughout successive propagations however the phenotype may vary significantly with variations in environment such as light intensity and temperature. To show the phenotype as described 'White Elite Reagan' can be planted without assimilation lightning (high pressure sodium lamps) between week 50 and week 40 of the next year under greenhouse conditions in Holland. With assimilation light (minimum level 2500 lux) it can be planted year round under greenhouse conditions in Holland.

From the cultivars known to inventor the most similar existing cultivar in comparison to 'White Elite Reagan' is 'White Reagan' and 'White Reagan Mundo'. When 'White Reagan' and 'White Elite Reagan' are being compared the following differences and similarities are noticed: The differences of 'White Reagan' and 'White Elite Reagan' are: (1) Flower color. The flower of 'White Elite Reagan' is more pure white. (2) Color of the buds. The color of the buds of 'White Elite Reagan' is also more pure white. (3) Color of the disc flowers. The disc of 'White Elite Reagan' is greener. (4) The flower disc of 'White Elite Reagan' is smaller. (5) Flower size. The flower of 'White Elite Reagan' is a little smaller. (6) Flower shape. The ray-florets of 'White Elite Reagan' are more pointed and are more upright (7) the growth rate. The growth of 'White Elite Reagan' is more vigorous. (8) Response time. The response time of 'White Elite Reagan' is several days shorter. For these characteristics 'White Elite Reagan' has been selected out of 'White Reagan'. All other characteristics of 'White Reagan' and 'White Elite Reagan' are very similar.

'White Reagan Mundo' has the same flower shape as 'White Elite Reagan'. The flower disc however is not so small. The growth is less vigorous instead of more vigorous. The spray formation is more spreading, with a bigger angle of the peduncles with the stem instead of more upright for 'White Elite Reagan' and the most essential difference: 'White Elite Reagan' does not have a low temperature tolerance as 'White Reagan Mundo'.

The following is a description of the plant and characteristics that distinguish 'White Elite Reagan' as a new and distinct variety.

The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society color chart, edition 1995.

Table 1: Botanical Description of  
CULTIVAR 'White Elite Reagan'

Bud

Size	Medium, cross-section +/- 1.0 cm height +/- 0.8 cm
Outside Color	White 155 A
Involucral bracts	2 rows, length 7 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Green 138 B

Bloom

Type	Single
Height	Flat
Size	Medium
Fully Expanded	6.0 – 7.0 cm
Number of blooms per single stem	Average of 11 to 13
Seeds	Not produced
Performance ( blooming period)	26 – 28 days
Fragrance	Typical chrysanthemum

Color

Center of the flower (disc-florets)	Immature yellow-green 144 A, mature yellow-green 144 A in the center to yellow 3 A along the border
Color of upper surface of the majority of the ray-florets	White 155 D
Color of the lower surface of the majority of the ray-florets	White 155 D

Tonality from Distance	A spray mum with white flowers and a yellow-green disc
Discoloration to color	No discoloration

#### Ray florets

Texture	Upper and under side smooth
Number	22 – 24
Cross-section	Flat, sometimes convex
Longitudinal axis of majority	Straight, sometimes reflexing
Length of corolla tube	Very short to short
Ray-floret length	3.5 cm
Ray-floret width	1.2 cm
Ratio length / width	Low to medium
Shape of tip	Pointed

#### Disc florets

Disc diameter	Medium to small, 1.0 – 1.2 cm
Distribution of disc florets	Numerous, clearly visible at all stages of flowering
Type	Tubular
Color	Yellow-green 144 A
Receptacle shape	Conical raised

#### Reproductive Organs

Stamen (present in disc florets only)	Yellow-green, thin 3 mm in length
Stamen color	Yellow-green 150 B
Pollen	Appears at a very late stage of flowering,
Pollen color	Close to yellow 12 A
Styles (present in both ray and disc florets)	Green, thin
Style color	Green 143 B

Style Length	4 mm
Stigmas	Yellow-green
Stigma Width	1 mm
Ovaries	Enclosed in calyx

#### Plant

Form	A spray mum meant for erect culture
Growth habit	Upright
Growth rate	Vigorous
Height	105 – 130 cm
internodes	3- 3.5 cm
Spray formation	Corymbiform (funnel-shaped, with a little round to flat umbel on top)
Peduncle length	Near the top 14 cm, near the middle 21 cm, near the bottom 26 cm
Peduncle color	Green 138 B
Peduncle, attachment	Good, not brittle
Peduncle, angle with stem	Small, 30 °
Stem Color	Green 144 A
Stem Strength	Medium
Stem Brittleness	Absent
Stem Anthocyanin Coloration	Absent
Flowering Response(photo-periodic controlled crop, not natural season)	49 days

#### Foliage

Color	Upper side green 137 A Under side green 147 B
Size	Medium; length +/- 12 cm, width +/- 8 cm
Quantity (number per single stem)	22 – 28
Shape	Ovate

Texture upper side	Scabrous
Texture under side	Slightly pubescent
Venation arrangement	Pinnate
Shape of the margin	Lobed
Shape of Base of Sinus Between Lateral Lobes	Round
Margin of Sinus Between Lateral Lobes	Converging
Shape of Base	Truncate
Apex	Mucronate

Table 2: Differences with the comparison Varieties

	'White Elite Reagan'	'White Reagan'	'White Reagan Mundo'
Color of the buds	White 155 A	Yellow 4 D	Yellow 4 D
Flower disc size	1.0 – 1.2 cm	1.5 cm	1.3 – 1.5 cm
Growth rate	Vigorous	Medium	Medium
Plant height	105 – 130 cm	100 – 125 cm	100 – 115
Peduncle angle with the stem	30°	30 - 35°	40°
Required minimum night temperature	17°C	17° C	14° C